

**BNSF**

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**ORIGINAL**

November 11, 1999

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William E. Kennard, Chairman  
Federal Communications Commission  
The Portals  
445 Twelfth Street, S.W.  
Washington, DC 20554**RECEIVED**  
**NOV 18 1999**  
**FCC MAIL ROOM**

RE: WT Docket Number 99-168

Dear Chairman Kennard,

The Burlington Northern and Santa Fe Railway Company is very concerned that enough spectrum will be available to meet the need to support safe operations of the rail industry as we transition from our present voice-based systems to a highly mobile command and control environment. I understand that the FCC will be considering allocating some of the remaining 36 MHz of spectrum at 746-806 MHz for private radio users, including the railroad industry. Spectrum below 1 GHz is particularly valuable for our long-term vision due to its more favorable characteristics and the wide geographic scope of our needs. The purpose of this letter is to seek your assistance in allocating some of that spectrum specifically for private radio use.

The Burlington Northern Santa Fe operates in 27 states. We employ more than 45,000 people that manage as many as 1600 trains a day operating on over 33,000 miles of track. We currently use over 15,000 mobile radios installed in vehicles and locomotives and, approximately 25,000 hand held radios, all of which must have the ability to maintain reliable communications through our territories in the western United States. Our mobile radio users depend on radio spectrum being available to conduct their jobs safely and efficiently.

The incorporation of new technologies and improved data communications in our highly mobile environment will give us the ability to provide even greater safety for our employees as well as the public. The radio systems supporting these new services must also help us maintain our ability to service a growing customer base, and assist in managing pressure from the Federal Railroad Administration (FRA) to improve operations.

To meet this challenge we are converting from analog to digital systems to provide the vehicle for improved voice quality and direct mobile data connections. Many of these expanded applications will require that we provide greater amounts of information, both voice and data, to our mobile work force. The expanded information requirements will, necessarily, require adequate spectrum resources to be successful.

Implementing Positive Train Control (PTC) is one of the FRA's core goals to improve industry safety. PTC requires a robust data radio infrastructure to operate effectively. Train identification, location, speed, and direction are key data elements that must be delivered to control center computer systems for safe movement along the rail. The rail industry's reliance on private radio communications systems for PTC makes an increase in spectrum for these systems critical to our success.

Commercial communications services are in heavy use today in rail operations to supplement our bandwidth requirements but their capabilities and coverage areas do not meet our mission critical communications requirements. As a result, commercial services cannot, in their present form, meet our expanding requirements.

We are aware that the Balanced Budget Act of 1997 requires the FCC to auction the 746-806 MHz spectrum. The railroad industry however, as stated in previous filings with the FCC, cannot compete effectively for spectrum with large commercial service providers. Our business is transporting goods and materials consistently in a nationwide context and the current allocation strategy (large blocks of spectrum geographically limited to MTA's and BTA's) complicates our ability to develop a seamless

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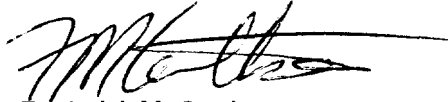
nationwide radio system. The Commission should specifically allocate a sufficient segment of the 746-806 spectrum for private systems users that could meet this wider range of requirements.

I understand that the Commission is evaluating the concept of a Band Manager as a means of acquiring and managing spectrum for private end-users. This approach seems acceptable for the 746-806 band if the result is additional spectrum allocated for private users.

The plan submitted by Motorola to the FCC, which would dedicate 6 MHz of spectrum from the 746-806 MHz band for private mobile radio service, would meet at least a part of our needs for additional RF spectrum.

Thank you for your consideration regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'F. Gratke', with a stylized flourish at the end.

Frederick M. Gratke  
AVP Telecommunications

cc: Thomas J. Keller, Verner, Liipfert  
Lou Warshot, AAR  
Howard Moody, AAR  
Thomas J. Sugrue, Chief of the Wireless Telecommunications Bureau, FCC  
Commissioner Susan Ness, FCC  
Commissioner Harold W. Furchtgott-Roth, FCC  
Commissioner Michael K. Powell, FCC  
Commissioner Gloria Tristani, FCC  
Office of the Secretary, FCC

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